

CLAIMS

1. A pharmaceutical composition for the treatment of cancer, characterized in that it comprises a CXCR3 inhibitor.

5 2. The composition according to claim 1, wherein the cancer is metastatic cancer expressing CXCR3.

3. The composition according to claim 1 or 2, wherein the cancer is selected from the group consisting of melanoma, breast cancer, intestine cancer and ovary cancer.

10 4. The composition according to any one of claims 1 to 3, which is to inhibit or suppress metastasis of cancer cells to lymph node or survival of cancer cells.

5. The composition according to any one of claims 1 to 4, wherein the CXCR3 inhibitor is selected from the group consisting of (A) an inhibitor of signaling through CXCR3 in cancer cells and (B) an inhibitor of CXCR3 expression.

6. The composition according to claim 5, wherein (A) the inhibitor of signaling through CXCR3 in cancer cells is selected from the group consisting of a CXCR3 antagonist, an antibody against CXCR3 ligand and a fragment having the antigen binding activity thereof; and (B) the inhibitor of CXCR3 expression is selected from the group consisting of a CXCR3 antisense, a siRNA and a CXCR3 expression inhibitor.

20 7. The composition according to claim 6, wherein the CXCR3 ligand is CXCL9, CXCL10 or CXCL11.

25 8. The composition according to claim 6 or 7, wherein the CXCR3 antagonist includes an anti-CXCR3 antibody, a fragment having the antigen binding activity of anti-CXCR3 antibody, a mutant of CXCR3 ligand, an inhibitor of ligand binding, and an anti-idiotypic antibody.

9. The composition according to claim 6, wherein the CXCR3 antisense is a DNA having sequence complementary to a DNA fragment in a

coding sequence or 5' non-coding sequence of DNA comprising the base sequence set forth in SEQ ID NO: 2 or an RNA corresponding to the DNA, or a chemically modified variant thereof.

5 10. A method for treating cancer or preventing metastasis of cancer, which comprises administering the composition of CXCR3 inhibitor according to any one of claims 1 to 9 to a subject in need of such treatment.

11. The method according to claim 10, wherein the cancer is metastatic cancer expressing CXCR3

10 12. The method according to claim 10 or 11, wherein the metastatic cancer is selected from the group consisting of melanoma, breast cancer, intestine cancer and ovary cancer.

13. The method according to any one of claims 10 to 12, wherein the metastasis is metastasis to lymph node.

15 14. A method of screening drugs for the treatment of cancer expressing CXCR3, comprising the steps of:

- 1) contacting a test compound with a cell expressing CXCR3; and
- 2) determining whether the test compound inhibits CXCR3.